

## ABSTRACT OF THE DISCLOSURE

Methods and equipment for establishing a voice and data telecommunications system with the benefits of hardwiring, free of a requirement for extending telephone copper wire service to geographical areas, or into building complexes, where none exists. An electrical capacitive interconnection is established which enables use of existing analog-operated carrier mediums to provide the benefits of hardwired telephone service. Outgoing messages in analog are converted to digital for telephone communication. In a specific embodiment, a capacitive interconnection enables compatible utilization of electrical power lines for carrying such digital signal telecommunication, which is then converted to analog at a receiving location. Computer-operated control enables voice/data communication between multiple users in which communications can be sent and received simultaneously, in both directions, over the same line.